

# COMMISSION ACTION

NCPC File No. 6200



**WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY  
COMPREHENSIVE ESCALATOR CANOPY PROGRAM  
PRELIMINARY AND FINAL SITE AND BUILDING PLANS**

Submission by the Washington Metropolitan Area Transit Authority

December 4, 2003

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***Commission Action Requested by Applicant***

Approval of preliminary and final site and building plans pursuant to 40 U.S.C. § 8722(d), Section 5 of the National Capital Planning Act (40 U.S.C. § 8722(b) (1))) and the Washington Metropolitan Area Transit Authority Compact, D.C. Code § 9-1107.01.

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***Commission Action***

The Commission:

Approves the preliminary and final site and building plans for the installation of Metro Station Entrance Canopies over exposed escalators throughout the Metrorail system, as shown on NCPC Map File No. 1000.00(46.00)41263, except at eight locations (Archives-Navy Memorial, Dupont Circle North, U-Street African American Memorial, Judiciary Square North, Smithsonian Institution North, Arlington Cemetery, Cleveland Park and Gallery Place/Chinatown West).

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Deborah B. Young  
Secretary to the National Capital Planning Commission

# STAFF RECOMMENDATION

D. Hamilton



**NCPC File No. 6200**

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## **WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY COMPREHENSIVE ESCALATOR CANOPY PROGRAM PRELIMINARY AND FINAL SITE AND BUILDING PLANS**

Submission by the Washington Metropolitan Area Transit Authority

November 26, 2003

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### ***Abstract***

The Washington Metropolitan Area Transit Authority (WMATA) has submitted preliminary and final site and building plans for the installation of new canopies over exposed escalators at 53 locations throughout the Metrorail system. The purpose for these canopies is to resolve code compliance issues that resulted from changes to the escalator code as well as to shield WMATA customers from rain and snow while protecting the escalators from the elements. The design is a result of a design competition held by WMATA. The concept was approved by the Commission at its December 6, 2001 meeting.

### ***Commission Action Requested by Applicant***

Approval of preliminary and final site and building plans pursuant to 40 U.S.C. § 8722(d), Section 5 of the National Capital Planning Act (40 U.S.C. § 8722(b) (1))) and the Washington Metropolitan Area Transit Authority Compact, D.C. Code § 9-1107.01

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### ***Executive Director's Recommendation***

The Commission:

**Approve** the preliminary and final site and building plans for the installation of Metro Station Entrance Canopies over exposed escalators throughout the Metrorail system, as shown on NCPC Map File No. 1000.00(46.00)41263

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## **BACKGROUND AND STAFF EVALUATION**

### *PROJECT DESCRIPTION*

WMATA has submitted preliminary and final site and building plans for the installation of canopies over the exposed escalators of its entrances throughout the Metrorail system. The comprehensive escalator canopy program began in 1998. The purpose for the installation of the canopies is to resolve a Code compliance issue resulting from changes to the escalator code, which requires that all exterior escalators be enclosed. The canopies will also shield WMATA customers from rain and snow while protecting the escalators from the elements, a major cause of down time for repairs.

The current submission includes the typical design for all of WMATA's station entrances except for four entrances in the District of Columbia (DC) and one in Virginia. The four entrances in DC that are not included are the Archives-Navy Memorial entrance, U Street-African American Memorial, Judiciary Square North, and Smithsonian Institution North. The station entrance in Virginia that is not included is the Arlington Cemetery station. The design for these canopies has not yet been developed and will be a "custom" design that will be tailored to be compatible with their unique characteristics. Once these designs are developed, they will be submitted to the Commission for review and approval.

The submitted plans provide for a cambered vault of steel and glass supported by steel trusses. The form is intended to be reminiscent of the coffered ceiling vault of the interior of the Metro stations. Canopy framing is comprised of arched longitudinal and transverse steel tube members, forming a visual coffered grid. The framework is supported above the escalator opening by tempered diagonal steel struts that are mounted with steel plinth blocks to the top of the existing parapet walls. The composition of the side wall and rear wall diagonal trusses act together as a truss diaphragm to support the canopy vertical loads as well as provide lateral stability. The glazing system is comprised of aluminum framing members, and modular glass panels rest upon the canopy's structural grid framework. Lighting is comprised of a combination fiber optic lights and halogen lights.

No signage is proposed.

### *PREVIOUS COMMISSION ACTION*

At its December 6, 2001 meeting, the Commission approved the design concept for the proposed canopies, provided that:

- Wind tunnel tests or observations are conducted.
- The glass panels for the roofs of the canopies are designed in a manner that they can be easily replaced in the event they are broken.
- Consideration is given to a more systematic approach to keeping the panels clean.
- Adequate identification signs are displayed to direct passengers as they approach Metro stations.

Finally, at that time, the Commission strongly recommended that WMATA erect prototypes of the canopy at several locations.

### *EVALUATION*

Staff recommends approval of the preliminary and final site and building plans. WMATA has responded to the Commission's recommendations and developed prototypes that have been erected for several months. WMATA has addressed the previous issues of the Commission:

- WMATA has provided prototypes of the canopy at four locations (Brookland, L'Enfant Plaza, Virginia Square, and Medical Center) for the purpose of observing and studying how they function, and found that there were minimal, if any, changes to the wind patterns and velocities in and out of the stations following the canopy installation. Additionally, there were no complaints from the riding public.
- The canopies have been provided with a standard glass panel that will facilitate safe and easy replacement in the event any of the panels are broken. Heat strengthened laminated glass is being used so that if broken, it will stay in place and pieces of it will not dislodge and fall onto the escalators below.
- The tops of the canopies have been designed to be self-cleaning, from rainfall. The entire canopy will be cleaned once or twice a year and the canopies will be included in WMATA's regular maintenance program. The maintenance program for the canopies was developed as a result of observations of the prototypes.
- WMATA decided that it would be inappropriate to provide additional signage on the canopies because it would detract from the overall simplicity of the design. Further, the canopies should become a readily recognized icon, similar to the existing Metro pylons, which direct passengers to the station.

The overall design of the canopies is simple, graceful, draws strong reference to the coffered ceiling of the metro tunnel, and has received a Blue Ribbon "Award of Excellence" from the American Institute of Architects (Washington D.C. Chapter).

### *COORDINATION*

#### Coordinating Committee

The Coordinating Committee reviewed this item at its meeting on November 12, 2003, and forwarded the proposal to the Commission with the statement that the project has been coordinated with all agencies participating. The participating agencies were NCPC; the District of Columbia Office of Planning; the Department of Housing and Community Development; the District Department of Transportation; the General Services Administration; and the Washington Metropolitan Area Transit Authority.

Commission of Fine Arts

At its October 16, 2003 meeting, the Commission of Fine Arts reviewed and approved the final plans for the canopies.

*CONFORMANCE*

Comprehensive Plan

The proposal is consistent with the intent of the Comprehensive Plan for federal workers to use mass transit to the maximum extent possible in commuting to and from their workstations.

National Historic Preservation Act

WMATA has consulted with all three affected state historic preservation offices. The Virginia, Maryland, and District of Columbia SHPOs have concurred with WMATA that the construction of the proposed canopies would have No Adverse Effect on historic resources adjacent to the Metro stations in their jurisdictions.

National Environmental Policy Act

WMATA has coordinated the proposal with the Federal Transit Authority, which designated the canopy project a Categorical Exclusion.